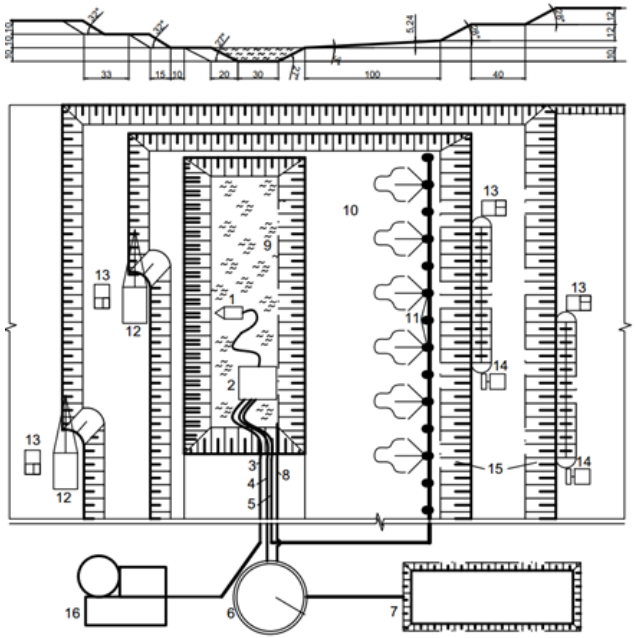
Integrated development of titanium-zirconium deposits in Ukraine



Drawing 1. Scheme of technology of complex development of placer deposit

1 - mining dredger;
2 - rough concentrate factory;
3 - pulp of the collective concentrate to the reference concentrating factory;
4 - pulp pipe tailings enrichment of the clay fraction;
5 - pulp pipeline of tailings of sand fraction enrichment;
6 - thickener tailings enrichment of the clay fraction;
7 - tailings of clay tailings enrichment;
8 - circulating water supply;
9 - slope of the underwater hydraulic dump;
10 - slope of the hydraulic dump;
11 - releases of sand tails on the slurry pipe;
12 - dragline;
13 - dump truck;
14 - bulldozer;
15 - slopes of dump tiers;
16 - concentrating factory.

Positive environmental effects when using such a scheme for the development of deposits:

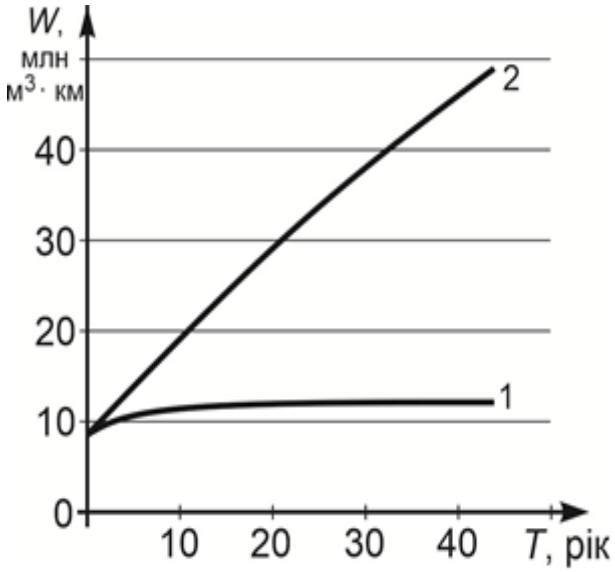


Figure 2. Change in the volume of transport work during the development of an alluvial deposit using an enrichment plant over the years: 1 - floating; 2 - stationary

- Rational use of the territory occupied by the dump farm
- Use of rock from dump sites with a small concentration of minerals.
- Reducing transport operations, thereby reducing environmental damage from emissions of internal combustion engines
- Rational use of resources involved in the development of the field